

Ship Aug 02

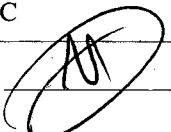
Work Order ID 163145

163145

Page 1

Thursday, June 22, 2017 9:14:38 AM

Item ID: D4464-041 Accept *N900040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Fuel Tank Assembly
 Start Date: 7/10/2017 Start Qty: 1.00 *1* Cust Item ID:
 Required Date: 7/31/2017 Req'd Qty: 1.00 *1* Customer:
 Reference: SCHEDULED/C

Approvals: Process Plan:  Date: JUN 22 2017 Tooling: Date: Run Start *NR1*
 QC: Date: SPC (Y/N): Date: Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D4464	H

100 Weld per dwg A/R Aluminum rod Batch: 131562 0.00

100

Large Fab

Large Fab

Memo

3.19

1- Weld D4023-3 cap as per dwg D4464

2- Buff alodine on all edges welded parts.  2017-06-27

JUN 28 2017

DAS
24
9-89

110

QC9- Inspect visual per QSI004- Fusion Welds

0.00

110

QC

Quality Control

Memo

0.02

17-06-23

DAS
9
9-89

112

0.00

112

Small Fab

Small Fab

Memo

2.46

Wet install baffles to front and back panel using rivet and Proseal as per dwg

A/R Proseal Batch: 137495

17/07/14

DAS
36
9-89

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QS1042) Approval		
Description Work Order Deviation				Disposition				Completed By _____ Lead hand / Supervisor Approval Verification _____ QC / QA Coordinator Approval _____	
7103 0 5 1111									
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐		FAULT CATEGORY Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐		Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
		OTHER : _____							

Work Order ID 163145***163145***

Page 2

Thursday, June 22, 2017 9:14:38 AM

Item ID: D4464-041 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Fuel Tank Assembly
Start Date: 7/10/2017 Start Qty: 1.00 ***1*** Cust Item ID:
Required Date: 7/31/2017 Req'd Qty: 1.00 ***1*** Customer:
Reference: SCHEDULED/C

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

114

QC5- Inspect part completeness to step on W/O

0.00

114

QC

Memo

0.02

Quality Control

120

Weld per dwg A/R Aluminum rod Batch: 137078 0.00***120***

Large Fab

Memo

2.42

Large Fab

1- Use fixture to weld D4125 bolws to D4463-13 as per dwg.

2- Tack Weld D4463-3 to side, front a back panel.

1 JUL 26 2017 DAS
9-89

17-07-14

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																						
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																						
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																						
Large Fab ☐	Composite ☐	Supplier ☐																							
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval																		
Description Work Order Deviation				Disposition			Completed By																		
1008 25 JUL							Lead hand / Supervisor Approval Verification																		
							QC / QA Coordinator Approval																		
Root Cause		FAULT CATEGORY																							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐	OTHER : _____																			

Work Order ID 163145

Thursday, June 22, 2017 9:14:38 AM

163145

Page 3

Item ID: D4464-041 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Fuel Tank Assembly
 Start Date: 7/10/2017 Start Qty: 1.00 ***1*** Cust Item ID:
 Required Date: 7/31/2017 Req'd Qty: 1.00 ***1*** Customer:
 Reference: SCHEDULED/C

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
123		0.00							
123									
Small Fab	Memo	1.00							
Small Fab	Transfer drill and c'sink D4975-1 bracket to bottom bracket , wet install as per dwg Proseal 890B Batch: <u>137495</u>								
	Install hinge wet with proseal as per dwg A/R Proseal 890B Batch: <u>137495</u>								
	Instal D4000-9 grommets as per dwg, ***D4000-1 FLAT SURFACE MUST BE INSTALL UPWARDS AS PER DWG***								
	Install fitting D4000-1 wet with proseal as per dwg A/R Proseal 890B Batch: <u>137495</u>								
140	Weld per dwg A/R Aluminum rod Batch: <u>137078</u>	0.00							
140									
Large Fab	Memo	1.00							
Large Fab	Finish welding the rest of the tank.								

DAS
36
9-89

1X 17/07/20

1 JUL 28 2017 24
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																															
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																																																																				
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																																																																				
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																																																																				
Large Fab ☐	Composite ☐	Supplier ☐																																																																					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																																																																
Description Work Order Deviation				Disposition																																																																			
								Completed By																																																															
								Lead hand / Supervisor Approval Verification																																																															
								QC / QA Coordinator Approval																																																															
Root Cause <table style="width:100%; border: none;"> <tr><td style="border: none;">Environment ☐</td><td style="border: none;">No Re-verification ☐</td></tr> <tr><td style="border: none;">Design ☐</td><td style="border: none;">Operator ☐</td></tr> <tr><td style="border: none;">Doc/Data ☐</td><td style="border: none;">Offset/Setup ☐</td></tr> <tr><td style="border: none;">Equip/Tooling ☐</td><td style="border: none;">Supplier ☐</td></tr> <tr><td style="border: none;">Handling/Pre ☐</td><td style="border: none;">Training ☐</td></tr> <tr><td style="border: none;">Material ☐</td><td style="border: none;">Use for Testing ☐</td></tr> <tr><td style="border: none;">Internal Transport ☐</td><td style="border: none;">Poor Information ☐</td></tr> <tr><td style="border: none;">Tribal Knowledge ☐</td><td style="border: none;">Rushing ☐</td></tr> <tr><td style="border: none;">LOA ☐</td><td style="border: none;">Product Improvement ☐</td></tr> <tr><td style="border: none;">Substation ☐</td><td style="border: none;">Process Improvement ☐</td></tr> <tr><td style="border: none;">Past Expiry Date ☐</td><td style="border: none;">Manufacturing Process ☐</td></tr> <tr><td style="border: none;">Misidentified ☐</td><td style="border: none;">Past Due ☐</td></tr> </table>		Environment ☐	No Re-verification ☐	Design ☐	Operator ☐	Doc/Data ☐	Offset/Setup ☐	Equip/Tooling ☐	Supplier ☐	Handling/Pre ☐	Training ☐	Material ☐	Use for Testing ☐	Internal Transport ☐	Poor Information ☐	Tribal Knowledge ☐	Rushing ☐	LOA ☐	Product Improvement ☐	Substation ☐	Process Improvement ☐	Past Expiry Date ☐	Manufacturing Process ☐	Misidentified ☐	Past Due ☐	FAULT CATEGORY <table style="width:100%; border: none;"> <tr><td style="border: none;">Pressure/Forced ☐</td><td style="border: none;">Temperature/Cure ☐</td><td style="border: none;">Power Loss/Surge ☐</td><td style="border: none;">Positioned Wrong ☐</td></tr> <tr><td style="border: none;">Bending ☐</td><td style="border: none;">Set-up ☐</td><td style="border: none;">Folio/Program ☐</td><td style="border: none;">Outside Dimensions ☐</td></tr> <tr><td style="border: none;">Centre Not Concentric ☐</td><td style="border: none;">BOM/Route ☐</td><td style="border: none;">Grain ☐</td><td style="border: none;">Over/Under tolerance ☐</td></tr> <tr><td style="border: none;">Cracks ☐</td><td style="border: none;">Broken/Damage/Defect ☐</td><td style="border: none;">Weld ☐</td><td style="border: none;">Part Incorrect ☐</td></tr> <tr><td style="border: none;">Crimp/Kink/Ripple/Wave ☐</td><td style="border: none;">Inspection Incomplete/Unqualified ☐</td><td style="border: none;">Wrong Stock Pulled ☐</td><td style="border: none;">Part Lost/Missing ☐</td></tr> <tr><td style="border: none;">Cuffs ☐</td><td style="border: none;">Contamination ☐</td><td style="border: none;">Out of Sequence ☐</td><td style="border: none;">Part Moved ☐</td></tr> <tr><td style="border: none;">Crushing ☐</td><td style="border: none;">Countersink ☐</td><td style="border: none;">Off-set ☐</td><td style="border: none;">Drawing ☐</td></tr> <tr><td style="border: none;">Heat Treat ☐</td><td style="border: none;">Cut Too Short ☐</td><td style="border: none;">Mislabeled ☐</td><td style="border: none;">Finish ☐</td></tr> <tr><td style="border: none;">Wave/Twist in Tube ☐</td><td style="border: none;">Instructions Incomplete/Unclear ☐</td><td style="border: none;">Fit/Function ☐</td><td style="border: none;">Misread ☐</td></tr> <tr><td style="border: none;">Marks/Chatter ☐</td><td style="border: none;">Drill Holes ☐</td><td style="border: none;">Misaligned/off center ☐</td><td style="border: none;">Turning Sequence ☐</td></tr> </table>						Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐
Environment ☐	No Re-verification ☐																																																																						
Design ☐	Operator ☐																																																																						
Doc/Data ☐	Offset/Setup ☐																																																																						
Equip/Tooling ☐	Supplier ☐																																																																						
Handling/Pre ☐	Training ☐																																																																						
Material ☐	Use for Testing ☐																																																																						
Internal Transport ☐	Poor Information ☐																																																																						
Tribal Knowledge ☐	Rushing ☐																																																																						
LOA ☐	Product Improvement ☐																																																																						
Substation ☐	Process Improvement ☐																																																																						
Past Expiry Date ☐	Manufacturing Process ☐																																																																						
Misidentified ☐	Past Due ☐																																																																						
Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐																																																																				
Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐																																																																				
Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐																																																																				
Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐																																																																				
Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐																																																																				
Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐																																																																				
Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐																																																																				
Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐																																																																				
Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐																																																																				
Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐																																																																				
OTHER :																																																																							

Work Order ID 163145

Thursday, June 22, 2017 9:14:38 AM

163145

Page 4

Item ID: D4464-041 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Fuel Tank Assembly
 Start Date: 7/10/2017 Start Qty: 1.00 ***1*** Cust Item ID:
 Required Date: 7/31/2017 Req'd Qty: 1.00 ***1*** Customer:
 Reference: SCHEDULED/C

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
141	QC9- Inspect visual per QSI004- Fusion Welds	0.00							
141									DAS
QC	Memo	0.02							9
Quality Control									9-89
142	QC5- Inspect part completeness to step on W/O	0.00							
142									DAS
QC	Memo	0.02							9
Quality Control	***Pressure Test as per dwg D4464***								9-89
143	Outsource process - NDT per QSI038 4.1	0.00							
143									
Outsource2	Memo	180.00							
Outsource process - NDT	ISSUE P/O : <u>31279</u>								W
	LPI INSPECTION								2017-08-01
	C OF C IS REQUIRED								

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval	
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due	☐ Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ OTHER :	☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes	☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center	☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence				

Work Order ID 163145

Thursday, June 22, 2017 9:14:38 AM

163145

Page 5

Item ID: D4464-041 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Fuel Tank Assembly
Start Date: 7/10/2017 Start Qty: 1.00 ***1*** Cust Item ID:
Required Date: 7/31/2017 Req'd Qty: 1.00 ***1*** Customer:
Reference: SCHEDULED/C

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
145	Receive & Inspect for Damage & Mat'l Certs	0.00							
145									
Packaging	Memo	0.02							
Packaging									
147	QC6- All purchased or subcontracted products	0.00							
147									
QC	Memo	0.02							
Quality Control									
150	Chemical Conversion Coat per QSI005 4.1	0.00							
150									
HandFinish	Memo	1.48							
Hand Finishing	1- Alodine on tank. No alodine inside								

DAS
38
9-89
AUG 01 2017
2017/08/01
BEB

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																						
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																						
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																						
Large Fab ☐	Composite ☐	Supplier ☐																							
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																		
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval																	
Root Cause		FAULT CATEGORY																							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐																				
		OTHER :																							

Work Order ID 163145

Thursday, June 22, 2017 9:14:38 AM

163145

Page 6

Item ID: D4464-041 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Fuel Tank Assembly
 Start Date: 7/10/2017 Start Qty: 1.00 ***1*** Cust Item ID:
 Required Date: 7/31/2017 Req'd Qty: 1.00 ***1*** Customer:
 Reference: SCHEDULED/C

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160 *160* QC Quality Control	QC7-Inspect Chemical Conversion Coat Memo	0.00 0.01				1X			17/08/02 DAS 36 9-89
164 *164* Small Fab Small Fab	Memo 1- Brush Proseal 890A on all internal sheet metal folds Proseal 8990A Batch: 137495 2- Assemble as per dwg and for D4577-041/-3/-5 access panels install wet with proseal 890B A/R Proseal 890B Batch: 137495	0.00 1.48				1X			17/08/02 DAS 36 9-89
169 *169* QC Quality Control	QC5- Inspect part completeness to step on W/O Memo ***Pressure Test as per dwg D4464***	0.00 0.02							AUG 02 2017 DAS 38 9-89

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

Work Order ID 163145

Thursday, June 22, 2017 9:14:38 AM

163145

Page 7

Item ID: D4464-041 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Fuel Tank Assembly
Start Date: 7/10/2017 Start Qty: 1.00 ***1*** Cust Item ID:
Required Date: 7/31/2017 Req'd Qty: 1.00 ***1*** Customer:
Reference: SCHEDULED/C

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
170		0.00							DAS
170						1			41
SprayPaint	Memo	1.05							9-89
Spray Painting	***MASK PROIOR PRIME AND PAINT AS PER DWG***								AUG 03 2017
	PRIME TEMPO GREY AS PER DWG AND QSI								
	PRIMER BATCH: <u>137895</u>								
	PAINT FLAT GREY AS PER DWG AND QSI								
	PAINT BATCH: <u>136996</u>								
180	QC14- Inspect Spray Paint	0.00							
180									
QC	Memo	0.01							
Quality Control	***Pressure Test as per dwg D4464***								

N/A

① 17.08.04 80

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
OTHER : _____									

Work Order ID 163145

Thursday, June 22, 2017 9:14:38 AM

163145

Page 8

Item ID: D4464-041 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Fuel Tank Assembly
Start Date: 7/10/2017 Start Qty: 1.00 ***1*** Cust Item ID:
Required Date: 7/31/2017 Req'd Qty: 1.00 ***1*** Customer:
Reference: SCHEDULED/C

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
190 *190* Small Fab Small Fab	Memo 1- Install placards, fuel sender, tank support, fuel filler splash guard assy, fuel cap as per dwg 2- Abrade surface with red scotch brite and install cushion using contact cement A/R Contact Cement Batch: <u>137275</u>	0.00 1.84				<u>1X</u>			<u>17/28/04</u> DAS 36 9-89
200 *200* QC Quality Control	QC5- Inspect part completeness to step on W/O Memo	0.00 0.02				<u>1</u>			DAS 36 9-89 AUG 04 2017
210 *210* Packaging Packaging	Identify as per dwg & Stock Location <u>PPP161840</u> Memo	0.00 0.01							DAS 28 9-89 AUG 04 2017

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																																																										
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval																																																									
Root Cause		FAULT CATEGORY																																																															
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____			
Misidentified ☐	Past Due ☐																																																																

Work Order ID 163145

Thursday, June 22, 2017 9:14:38 AM

163145

Page 9

Item ID: D4464-041 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Fuel Tank Assembly
Start Date: 7/10/2017 Start Qty: 1.00 ***1*** Cust Item ID:
Required Date: 7/31/2017 Req'd Qty: 1.00 ***1*** Customer:
Reference: SCHEDULED/C

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
220	QC21- Final Inspection - Work Order Release	0.00							
220									
QC	Memo	0.10							
Quality Control									



AUG 04 2017

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐			
Design ☐	☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐			
Doc/Data ☐	☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐			
Equip/Tooling ☐	☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐			
Handling/Pre ☐	☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐			
Material ☐	☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐			
Internal Transport ☐	☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐			
Tribal Knowledge ☐	☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐			
LOA ☐	☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐			
Substation ☐	☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐			
Past Expiry Date ☐	☐	Manufacturing Process ☐	OTHER :						
Misidentified ☐	☐	Past Due ☐							

Picklist Print

Thursday, June 22, 2017 9:14:36 AM

Page 1

Work Order ID: 163145

163145

Parent Item: D4464-041

D4464-041

Parent Item Name: Fuel Tank Assembly

Start Date: 7/10/2017

Required Date: 7/31/2017

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP REV:A 11.11.23 NEW ISSUE DD VERF:EC IPP REV:B
12.03.08 AS PER DWG REV.B DD VERF:EC IPP REV:C 12.04.24
ECN 12-571 DD VERF:EC IPP REV:D 13.10.30 DWG
REV PE1 DD VERF:JLM IPP REV:E 14.06.13 AS PER DWG
REV.E DD VERF:JLM IPP REV:F 14.07.21 AS PER DWG REV.F DD
VERF:JLM IPP REV:G 15.01.15 AS PER DWG REV.G DD
VERF:JLM IPP REV:H 15.03.04 AS PER DWG REV.H9 DD
VERF:JLM IPP REV:I 15.06-17 AS PER DWG REV.H DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

MS20470AD4-6

Purchased

No

190

Each

2,871.000

8

8

MS20470AD4-6

**

Rivet, Universal Head

17/07/26 DAS
36
9-89

Location

Loc Qty

Loc Code

CCK004

1566

m137851

1566

GA

307

m133077

307

ST310

998

m136787

998

D3999-7

Manufactured

No

120

Each

7.0000

1

1

D3999-7

**

Corner

2017-06-27

Location

Loc Qty

Loc Code

WA003

7

108621

1

156521

6

8108621 →

1

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																						
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																						
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																						
Large Fab ☐	Composite ☐	Supplier ☐																							
Date : _____		Step #: _____		QTY Effective : _____			MRB (QS1042) Approval																		
Description Work Order Deviation				Disposition				Completed By																	
								Lead hand / Supervisor Approval Verification																	
								QC / QA Coordinator Approval																	
Root Cause		FAULT CATEGORY																							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐		OTHER : _____																		

Picklist Print

Thursday, June 22, 2017 9:14:36 AM

Page 2

Work Order ID: 163145

163145

Parent Item: D4464-041

D4464-041

Parent Item Name: Fuel Tank Assembly

Start Date: 7/10/2017

Required Date: 7/31/2017

Start Qty: 1.00

Required Qty: 1.00

D4000-1 Manufactured No

120 Each 4.0000 1 1

D4000-1

Fuel Supply Fitting

**

17/07/26
68-6
96
DAS

Location

Loc Qty

Loc Code

GA

4

161003

2

161942

2

D4000-5 Manufactured No

120 Each 14.0000 1 1

D4000-5

Fuel Tank Vent Fitting

**

~~2017-06-27~~

Location

Loc Qty

Loc Code

WA003

14

107388

3

158936

11

D4000-9 Manufactured No

120 Each 18.0000 3 3

D4000-9

Grommet

**

17/07/26
68-6
96
DAS

Location

Loc Qty

Loc Code

GA

18

152269

18

D4000-045 Manufactured No

120 Each 3.0000 1 1

D4000-045

Fuel Pickup Fitting Assembly

**

17/07/26
68-6
96
DAS

Location

Loc Qty

Loc Code

WA003

3

157379

3

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QS1042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : _____					

Picklist Print

Thursday, June 22, 2017 9:14:36 AM

Work Order ID: 163145

163145

Parent Item: D4464-041

D4464-041

Parent Item Name: Fuel Tank Assembly

Start Date: 7/10/2017

Required Date: 7/31/2017

Start Qty: 1.00

Required Qty: 1.00

D4008-11 Manufactured No

120 Each 5.0000 1 1

D4008-11

Hinge Half

**

17/07/26

DAS
36
9-89

Location

Loc Qty

Loc Code

GA
129867
154386
156452
160303

5
2
1
1
1

1

D4057-1 Manufactured No

120 Each 49.0000 3 3

D4057-1

Retaining Ring

**

17/07/26

DAS
36
9-89

Location

Loc Qty

Loc Code

GA
107269
156450

49
2
47

2

D4125-1 Manufactured No

120 Each 4.0000 1 1

D4125-1

Fwd Sediment Bowl

**

2017-06-27

Location

Loc Qty

Loc Code

WA003
156449

4
4

B156449 →

1

D4125-3 Manufactured No

120 Each 8.0000 1 1

D4125-3

Aft Sediment Bowl

**

2017-06-27

Location

Loc Qty

Loc Code

WA003
156459
160444

8
4
4

B160444 →

1

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐				
OTHER : _____									

Picklist Print

Thursday, June 22, 2017 9:14:36 AM

Page 4

Work Order ID: 163145

163145

Parent Item: D4464-041

D4464-041

Parent Item Name: Fuel Tank Assembly

Start Date: 7/10/2017

Required Date: 7/31/2017

Start Qty: 1.00

Required Qty: 1.00

D4404-5 Manufactured No

120 Each 10.0000 2 2

D4404-5

Cushion, Fwd

**

DAS

AUG 03 2017

6
9-89

Location

Loc Qty

Loc Code

ST095

10

160607

10

Manufactured No

112 Each 0.0000 1 1

D4462-1

D4462-1

Baffle

D4462-3

Manufactured No

112 Each 1.0000 1 1

D4462-3

Baffle

**

2017-06-27

Location

Loc Qty

Loc Code

WA003

1

157397

1

Manufactured No

120 Each 2.0000 1 1

D4463-041

D4463-041

Tank Top Assembly

**

2017-06-27

Location

Loc Qty

Loc Code

WA003

2

156437

1

159870

1

Manufactured No

120 Each 1.0000 1 1

D4463-3

D4463-3

Tank Aft End

**

2017-06-27

Location

Loc Qty

Loc Code

WA003

1

154384

1

Thursday, June 22, 2017 9:14:37 AM

Shop Packet Print

Page 4

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																											
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval																																																								
Description Work Order Deviation				Disposition				Completed By _____ Lead hand / Supervisor Approval Verification _____ QC / QA Coordinator Approval _____																																																							
Root Cause		FAULT CATEGORY																																																													
Environment ☐	Design ☐	Doc/Data ☐	Equip/Tooling ☐	Handling/Pre ☐	Material ☐	Internal Transport ☐	Tribal Knowledge ☐	LOA ☐	Substation ☐	Past Expiry Date ☐	Misidentified ☐	No Re-verification ☐	Operator ☐	Offset/Setup ☐	Supplier ☐	Training ☐	Use for Testing ☐	Poor Information ☐	Rushing ☐	Product Improvement ☐	Process Improvement ☐	Manufacturing Process ☐	Past Due ☐	Pressure/Forced ☐	Bending ☐	Centre Not Concentric ☐	Cracks ☐	Crimp/Kink/Ripple/Wave ☐	Cuffs ☐	Crushing ☐	Heat Treat ☐	Wave/Twist in Tube ☐	Marks/Chatter ☐	Temperature/Cure ☐	Set-up ☐	BOM/Route ☐	Broken/Damage/Defect ☐	Inspection Incomplete/Unqualified ☐	Contamination ☐	Countersink ☐	Cut Too Short ☐	Instructions Incomplete/Unclear ☐	Drill Holes ☐	Power Loss/Surge ☐	Folio/Program ☐	Grain ☐	Weld ☐	Wrong Stock Pulled ☐	Out of Sequence ☐	Off-set ☐	Mislabeled ☐	Fit/Function ☐	Misaligned/off center ☐	Positioned Wrong ☐	Outside Dimensions ☐	Over/Under tolerance ☐	Part Incorrect ☐	Part Lost/Missing ☐	Part Moved ☐	Drawing ☐	Finish ☐	Misread ☐	Turning Sequence ☐
																								OTHER : _____																																							

Picklist Print

Thursday, June 22, 2017 9:14:37 AM

Page 5

Work Order ID: 163145

163145

Parent Item: D4464-041

D4464-041

Parent Item Name: Fuel Tank Assembly

Start Date: 7/10/2017

Required Date: 7/31/2017

Start Qty: 1.00

Required Qty: 1.00

D4463-5

Manufactured No

120 Each 4.0000 1 1

D4463-5

Tank Upper Cut Out

**

DC 2017-06-27

Location

Loc Qty

Loc Code

WA003

4 B106751 → 1

106751

4

D4968-1

Manufactured No

190 Each 6.0000 1 1

D4968-1

Side Cushion

**

DAS

6

AUG 03 2017

9-89

Location

Loc Qty

Loc Code

ST400

6

156463

2

161963

4

D4023-3

Manufactured No

190 Each 8.0000 1 1

D4023-3

Cap And Flange

**

DC 2017-06-27

Location

Loc Qty

Loc Code

WA003

8 B152210 → 1

152210

1

154435

3

160125

4

D4463-7

Manufactured No

120 Each 6.0000 1 1

D4463-7

Tank Fwd End

**

DC 2017-06-27

Location

Loc Qty

Loc Code

WA003

6 B160612 → 1

160612

6

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

Picklist Print

Thursday, June 22, 2017 9:14:37 AM

Page 6

Work Order ID: 163145

163145

Parent Item: D4464-041

D4464-041

Parent Item Name: Fuel Tank Assembly

Start Date: 7/10/2017

Required Date: 7/31/2017

Start Qty: 1.00

Required Qty: 1.00

D4025-5

Manufactured No

190 Each 11.0000 1 1

D4025-5

Fuel Quantity Sender

**

DAS

6

9-89

AUG 03 2017

Location

Loc Qty

Loc Code

ST240

11

147065

2

154427

2

156462

3

160115

4

\$

DAS

36

9-89

D4463-9

Manufactured No

112 Each 0.0000 1 1

D4463-9

Tank Back

**

17/08/04

DAS

36

9-89

D4463-11

Manufactured No

112 Each 1.0000 1 1

D4463-11

Tank Front

**

DE 2017-06-27

Location

Loc Qty

Loc Code

WA003

1

154387

1

B154387 → 1

D4577-1

Manufactured No

190 Each 8.0000 1 1

D4577-1

Rear Access Panel

**

17/08/02

DAS

36

9-89

Location

Loc Qty

Loc Code

WA003

8

146093

4

162023

4

1

Thursday, June 22, 2017 9:14:37 AM

Shop Packet Print

Page 6

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

Picklist Print

Thursday, June 22, 2017 9:14:37 AM

Page 7

Work Order ID: 163145

163145

Parent Item: D4464-041

D4464-041

Parent Item Name: Fuel Tank Assembly

Start Date: 7/10/2017

Required Date: 7/31/2017

Start Qty: 1.00

Required Qty: 1.00

D3997-29 Manufactured No

190 Each 8.0000 1 1

D3997-29

Placard

**

DAS

6

9-89

AUG 03 2017

Location

Loc Qty

Loc Code

ST066

8

152611

2

11/8/2017

160134

6

5/4/2018

D3997-5 Manufactured No

190 Each 16.0000 2 2

D3997-5

Placard

**

DAS

6

9-89

AUG 03 2017

Location

Loc Qty

Loc Code

ST066

16

156464

4

2/14/2018

160135

6

5/4/2018

162579

6

6/19/2018

D3997-17 Manufactured No

190 Each 7.0000 1 1

D3997-17

Placard

**

DAS

6

9-89

AUG 03 2017

Location

Loc Qty

Loc Code

ST066

7

157362

6

152258

1

11/8/2017

D3997-43 Manufactured No

190 Each 8.0000 1 1

D3997-43

Placard

**

DAS

6

9-89

AUG 03 2017

Location

Loc Qty

Loc Code

ST069

8

152179

6

11/8/2017

157334

2

3/7/2018

Thursday, June 22, 2017 9:14:37 AM

Shop Packet Print

Page 7

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td style="border: none;"></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																						
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																						
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																						
Large Fab ☐	Composite ☐	Supplier ☐																							
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																		
Description Work Order Deviation				Disposition				Completed By																	
								Lead hand / Supervisor Approval Verification																	
										QC / QA Coordinator Approval															
Root Cause		FAULT CATEGORY																							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐	OTHER :																			

Picklist Print

Thursday, June 22, 2017 9:14:37 AM

Work Order ID: 163145

163145

Parent Item: D4464-041

D4464-041

Parent Item Name: Fuel Tank Assembly

Start Date: 7/10/2017

Required Date: 7/31/2017

Start Qty: 1.00

Required Qty: 1.00

NAS1149D0332J

Purchased

No

190

Each

967.0000

13

1312

NAS1149D0332.J

**

Washer

DAS
6
9-88

AUG 03 2017

Location

Loc Qty

Loc Code

FP

211

m136015

8

m137075

203

137963

GA

272

m136643

272

ST264

484

m136015

0

m137736

484

D4463-13

Manufactured

No

190

Each

2.0000

1

1

D4463-13

**

Tank Bottom

2017-06-27

Location

Loc Qty

Loc Code

WA003

2

154417

2

154417 →

1

D4975-1

Manufactured

No

190

Each

2.0000

1

1

D4975-1

**

Bracket

17/07/26

Location

Loc Qty

Loc Code

GA

2

159899

2

1

D4008-041

Manufactured

No

190

Each

6.0000

1

1

D4008-041

**

Fuel Filler Splash Guard Assembly

DAS
6
9-89

AUG 03 2017

Location

Loc Qty

Loc Code

ST243

6

157608

2

159884

4

1

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

Picklist Print

Thursday, June 22, 2017 9:14:37 AM

Page 9

Work Order ID: 163145

163145

Parent Item: D4464-041

D4464-041

Parent Item Name: Fuel Tank Assembly

Start Date: 7/10/2017

Required Date: 7/31/2017

Start Qty: 1.00

Required Qty: 1.00

AN3-5A Purchased No 169 Each 161.0000 24 24

AN3-5A

Bolt

**

Location

Loc Qty

Loc Code

FP001

6

m136986

6

ST350

155

m136986

155

MS21042L3 Purchased No 190 Each 1,693.000 4 4

MS21042L3

Nut

**

Location

Loc Qty

Loc Code

FP001

79

m135945

79

GA

394

m134360

102

M136665

292

OVER007

500

m134360

0

m137886

500

ST303

720

m137680

720

AN3H5A Purchased No 190 Each 37.0000 5 5

AN3H5A

Bolt

**

Location

Loc Qty

Loc Code

ST350

37

m136406

12

m137371

25

DAS
36
9-89

M137963
24x

AUG 03 2017
DAS
6
9-89

137988

AUG 03 2017
DAS
6
9-89

5

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td style="border: none;"></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																						
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																						
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																						
Large Fab ☐	Composite ☐	Supplier ☐																							
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval																		
Description Work Order Deviation				Disposition																					
X								Completed By																	
								Lead hand / Supervisor Approval Verification																	
								QC / QA Coordinator Approval																	
Root Cause		FAULT CATEGORY																							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐	OTHER : _____																			

Picklist Print

Thursday, June 22, 2017 9:14:37 AM

Work Order ID: 163145

163145

Parent Item: D4464-041

D4464-041

Parent Item Name: Fuel Tank Assembly

Start Date: 7/10/2017

Required Date: 7/31/2017

Start Qty: 1.00

Required Qty: 1.00

D3997-11 Manufactured No

190 Each 8.0000 1 1

D3997-11

**

Placard

Location

Loc Qty

Loc Code

ST066

8

152610

2

11/8/2017

160132

6

5/4/2018

DAS
6
9-89

AUG 03 2017

AN3-7A Purchased No

190 Each 237.0000 4 4

AN3-7A

**

Bolt

Location

Loc Qty

Loc Code

ST349

237

m137164

237

DAS
6
9-89

AUG 03 2017

D4577-3 Manufactured No

190 Each 7.0000 1 1

D4577-3

**

Middle Access Panel

Location

Loc Qty

Loc Code

WA003

7

146801

3

161869

4

B161869 →

1

D4062-041 Manufactured No

190 Each 8.0000 1 1

D4062-041

**

Tank Support Assembly

Location

Loc Qty

Loc Code

WA003

8

145585

3

159849

5

B159849 →

1

DC 2017-06-27

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

Picklist Print

Page 11

Thursday, June 22, 2017 9:14:38 AM

Work Order ID: 163145

163145

Parent Item: D4464-041

D4464-041

Parent Item Name: Fuel Tank Assembly

Start Date: 7/10/2017

Required Date: 7/31/2017

Start Qty: 1.00

Required Qty: 1.00

MS20426AD4-4

Purchased

No

190

Each

2,600.000

4

4

MS20426AD4-4

Rivet

**

17/07/26

DAS
36
9-89

Location

Loc Qty

Loc Code

GA

1121

125445

1121

ST312

1479

m132536

1479

4

D4577-041

Manufactured

No

190

Each

5.0000

1

1

D4577-041

Fwd Access Panel Assembly

** 2017-06-27

Location

Loc Qty

Loc Code

GA

3

146803

3

WA003

2

161870

2

B161870 →

1

MS20470AD4-4

Purchased

No

190

Each

2,548.000

165

165

MS20470AD4-4

Rivet, Universal Head

**

17/07/14

DAS
36
9-89

Location

Loc Qty

Loc Code

GA

2168

M136851

181

M137166

153

M137371

1834

ST310

380

M132803

380

160

138072

5x

Thursday, June 22, 2017 9:14:38 AM

Shop Packet Print

Page 11

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
		OTHER : ☐							

Picklist Print

Thursday, June 22, 2017 9:14:38 AM

Work Order ID: 163145

163145

Parent Item: D4464-041

D4464-041

Parent Item Name: Fuel Tank Assembly

Start Date: 7/10/2017

Required Date: 7/31/2017

Start Qty: 1.00

Required Qty: 1.00

NAS1149D0363J

Purchased

No

190

Each

746.0000

24

24

NAS1149D0363.I

**

Washer

17/08/22
DAS 36 9-89

Location

Loc Qty

Loc Code

GA

43

m134055

13

m137164

30

ST263

703

m137587

703

137963
24X

NAS1149D0316 J

B4502

1X

AUG 03 2017

DAS 6 9-89

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QS1042) Approval	
Description Work Order Deviation		Disposition		Completed By _____ Lead hand / Supervisor Approval Verification _____ QC / QA Coordinator Approval _____	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 163195

JUN 22 2017

RELEASED
2015-06-18
ECN 15-583

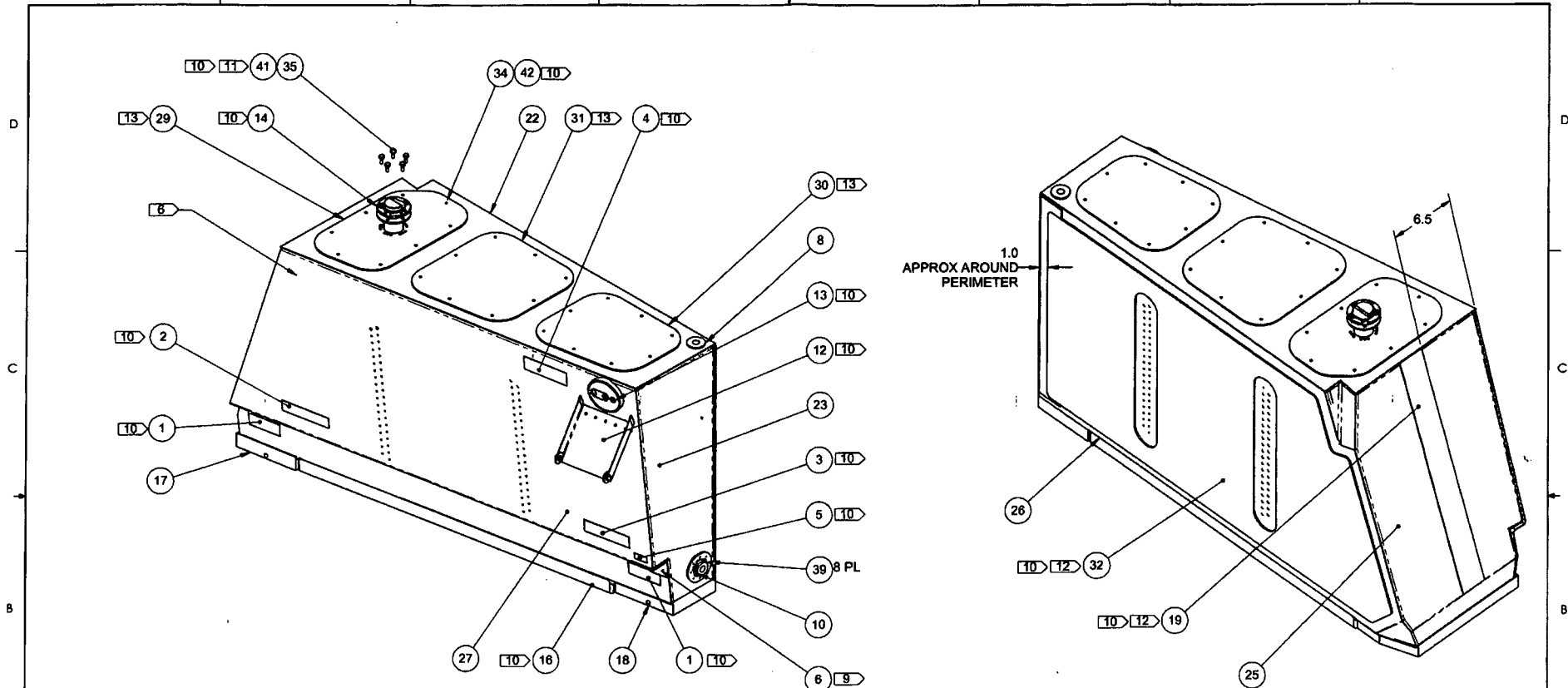
ITEM	QTY	PART NUMBER	DESCRIPTION
	X	D4464-041	FUEL TANK ASSEMBLY
1	2	D3997-5	PLACARD (AUX FUEL DRAIN)
2	1	D3997-11	PLACARD (LOADING)
3	1	D3997-17	PLACARD (STOWAGE)
4	1	D3997-29	PLACARD (WARNING)
5	1	D3997-43	PLACARD (EARTH)
6	1	D3999-7	CORNER
7	1	D4000-1	FITTING
8	1	D4000-5	FUEL TANK VENT FITTING
9	3	D4000-9	GROMMET
10	1	D4000-045	FUEL PICK UP AND STRAINER ASSEMBLY
11	1	D4008-11	TANK HINGE HALF
12	1	D4008-041	FUEL FILLER SPLASH GUARD ASSEMBLY
13	1	D4023-3	FUEL CAP AND FLANGE
14	1	D4025-5	FUEL SENDER
15	3	D4057-1	RETAINER
16	1	D4082-041	TANK SUPPORT
17	1	D4125-1	FWD SEDIMENT BOWL
18	1	D4125-3	AFT SEDIMENT BOWL
19	2	D4404-5	CUSHION, FWD
20	1	D4462-1	BAFFLE
21	1	D4462-3	BAFFLE
22	1	D4463-041	TOP TANK ASSEMBLY
23	1	D4463-3	TANK AFT END
24	1	D4463-5	TANK UPPER CUT OUT
25	1	D4463-7	TANK FORWARD END
26	1	D4463-9	TANK BACK
27	1	D4463-11	TANK FRONT
28	1	D4463-13	TANK BOTTOM
29	1	D4577-041	FWD ACCESS PANEL ASSEMBLY
30	1	D4577-1	REAR ACCESS PANEL
31	1	D4577-3	MIDDLE ACCESS PANEL
32	1	D4988-1	CUSHION, SIDE
33	1	D4975-1	ANGLE BRACKET
34	24	AN3-5A	BOLT
35	5	AN3H5A	BOLT
36	4	AN3-7A	BOLT
37	4	MS20426AD4-4	RIVET, CSK
38	165	MS20470AD4-4	RIVET, PANHEAD
39	8	MS20470AD4-6	RIVET, PANHEAD
40	4	MS21042L3	NUT
41	13	NAS1149D0332J	WASHER
42	24	NAS1149D0363J	WASHER

H	REPLACED NOTE 8 (SHT 2), ADDED NOTE 14 (SHT 2), ADDED AUXILIARY VIEW (SHT 3), ADDED NOTE 15 (SHT 4), REPLACED NOTE 13 (SHT 5), SHT 4 WAS SHT 3, SHT 5 WAS SHT 4, REMOVED D4124-1 TABS & AN3-6A BOLTS, CHEMICAL CONVERSION COAT NOW AFTER WELDING (SHT 5), ADD AN3-7A BOLTS	CC	15.02.06
G	FINISH "FLAT GREY" WAS "GREY" (SHT 2); PICTORIAL UPDATE FOR D4000-1 & D4462-1	AP	14.12.05
F	AN3-5A WAS AN3C4A QTY. 24 (ZN D6-2) AN3H5A WAS AN3-5A QTY. 5 (ZN D7-2) MS20470AD4-6 WAS MS20426AD4-6 QTY. 8 (ZN B5-2) D4000-1 IS NO LONGER INSTALLED WITH COUNTERSUNK RIVETS UPDATE NOTE 10 ON SHEET 3	ML	14.06.27
E	UPDATED -041 WITH RE-DESIGNED D4463-3/-8/-11 AND D4462-1/-3. D4988-1 REPLACES D4404-5 ON TANK SIDE (ZN C3-2) REF NCR 13-3100 AN3-8A REPLACES MS35206-286 (ZN B8-2) NAS1149D0332J REPLACES 5 X NAS1149D0363J (ZN D7-2) REF PAR 12-217 D4975-1 REPLACES D3999-8 (ZN C3-2) REMOVED TAB D3999-11 AND MOVED D3997-43 PLACARD (ZN B8-5) UPDATED BILL OF MATERIALS REVISED ALL NOTES REMOVED SHEET 5	ML	14.05.13
D	ADDED NOTE RE HAND FORMING D4124-1, ZN A8-4.	DC	12.05.02
C	UPDATED -041 WITH RE-DESIGNED D4463-11/-13 REV. C PARTS, ZN B8-2. UPDATED -041 WITH RE-DESIGNED D4577-041/-3/-5 PARTS, ZN C8-2.	DC	12.03.27
B	UPDATED -041 WITH RE-DESIGNED PARTS, REMOVED D4463-13. ADDED D4577-041/-1/-5 ACCESS PANELS, ZN C8-2.	DC	11.12.14
A	NEW ISSUE. REF PAR11-117 & CAR 11-54.	DC	11.10.19
REV.	DESCRIPTION	BY	DATE

APPROVED

DESIGN	ML	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	CC		
CHECKED	AP	DRAWING NO.	REV. H
MFG. APPR.	DD	D4464	SHEET 1 OF 5
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	TANK ASSEMBLY	NTS
DATE	15.02.06	COPYRIGHT © 2011 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

8 7 6 5 4 3 2 1



D4464-041 FUEL TANK ASSEMBLY

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: PRIME TEMPO GREY (4.2.1.3.2) PER DART QSI 005 4.2.1
PAINT FLAT GREY (4.2.2.3) PER DART QSI 005 4.2.2
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D350-794-141" USING D2729-1 RED DECAL
- 7) WEIGHT: 39.52 lbs
- 8) LPI AND PRESSURE TEST PER DART QSI 038 6.3
- 9) MASK PRIOR TO FINISH
- 10) INSTALL AFTER FINISH
- 11) LOCKWIRE BOLTS AFTER INSTALLATION PER AC 43.13 OR MS33540
- 12) INSTALL CUSHION USING CONTACT CEMENT. TRIM TO FIT IF REQUIRED
- 13) INSTALL D4577-041/-1/-3 ACCESS PANELS WET WITH PROSEAL P/S 8908.

RELEASED
18 2015-06-18

APPROVED	DESIGN	ML	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
	DRAWN	CC		
	CHECKED	AP	DRAWING NO.	REV. H
	MFG. APPR.	DD	D4464	SHEET 2 OF 5
	APPROVED	HS	TITLE	SCALE
	DE APPR.	DS	TANK ASSEMBLY	NTS
	DATE	15.02.06	COPYRIGHT © 2011 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

8 7 6 5 4 3 2 1

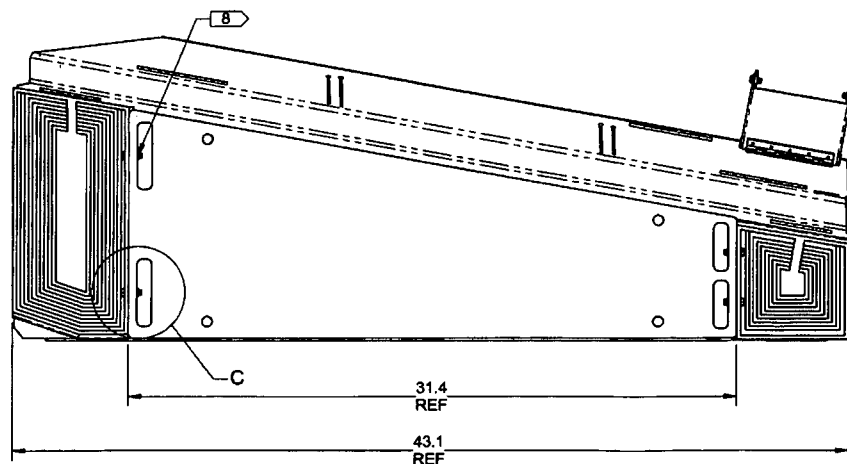
8 7 6 5 4 3 2 1

D

C

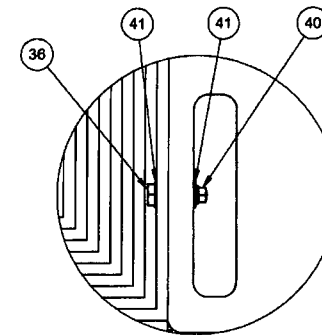
B

A



D4464-041 FUEL TANK ASSEMBLY
AUXILIARY VIEW

- NOTES:
- 1) MATERIAL: N/A
 - 2) FINISH: N/A
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: N/A
 - 6) IDENTIFICATION: N/A
 - 7) WEIGHT: N/A
 - 8) TRANSFER DRILL HOLES FROM D4125-1/-3 SEDIMENT BOWLS TO D4062-041 TANK SUPPORT ASSEMBLY

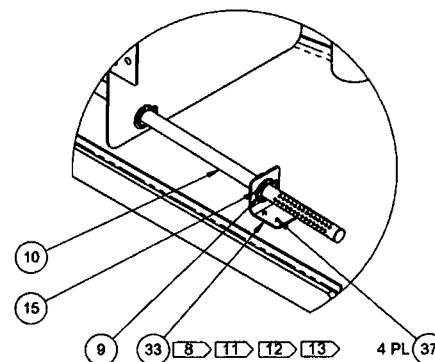


DETAIL C
SCALE 3X

RELEASED
2015-06-18

APPROVED	DESIGN	ML	DART AEROSPACE LTD	
	DRAWN	CC	HAWKESBURY, ONTARIO, CANADA	
	CHECKED	AP	DRAWING NO.	REV. H
	MFG. APPR.	DD	D4464	SHEET 3 OF 5
	APPROVED	HS	TITLE	SCALE
	DE APPR.	DS	TANK ASSEMBLY	NTS
DATE		15.02.06	COPYRIGHT © 2011 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

8 7 6 5 4 3 2 1

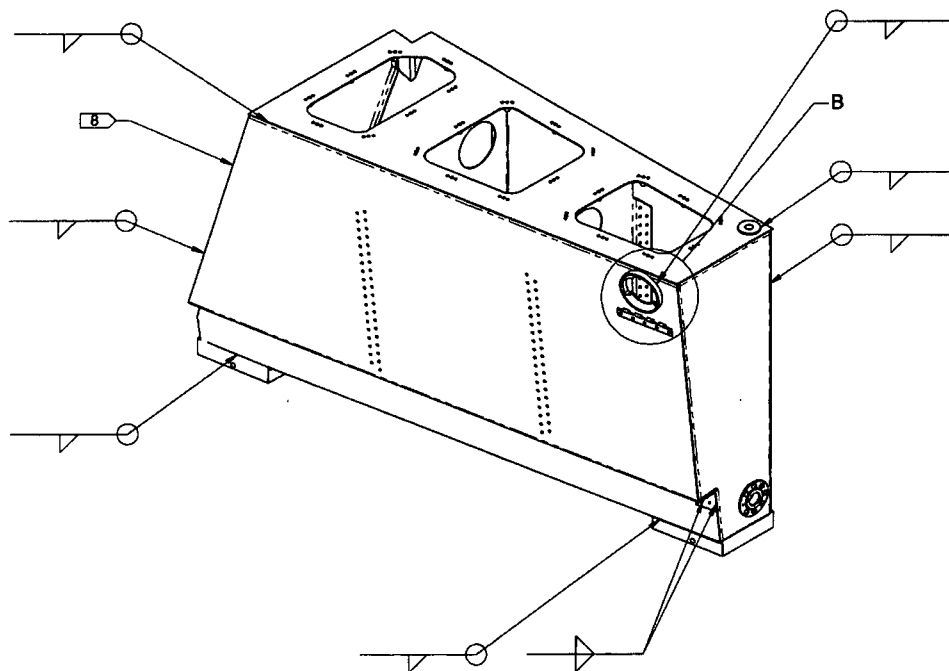


DETAIL A
ROTATED FOR CLARITY
SCALE 2X

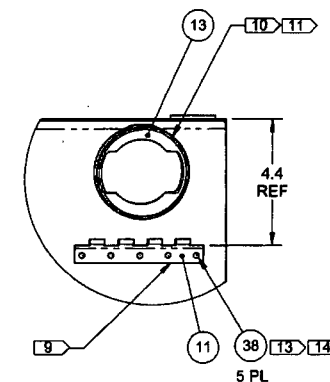
- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: N/A
- 8) COAT FAYING SURFACES OF D4975-1 ANGLE BRACKET AND D4463-13 TANK BOTTOM WITH PROSEAL P/S 890B AND WET INSTALL MS20426AD4-4 RIVETS
- 9) COAT FAYING SURFACES OF D4462-1/-3 BAFFLES AND D4463-9/-11 TANK FRONT/BACK WITH PROSEAL P/S 890B AND WET INSTALL MS20470AD4-4 RIVETS
- 10) COAT FAYING SURFACES OF D4000-1 FUEL SUPPLY FITTING AND D4463-3 TANK AFT END WITH PROSEAL P/S 890B AND WET INSTALL MS20470AD4-6 RIVETS
- 11) FILLET SEAL THE INTERIOR OF THE TANK AROUND THE EDGE OF D4975-1 ANGLE BRACKET, D4462-1/-3 BAFFLES AND D4000-1 FUEL SUPPLY FITTING WITH PROSEAL P/S 890B
- 12) DOME SEAL ALL BUCKED ENDS OF RIVETS WITH PROSEAL P/S 890B
- 13) TRANSFER DRILL Ø 0.128 HOLES FROM D4975-1 ANGLE BRACKET INTO D4463-13 TANK BOTTOM AND COUNTERSINK HOLES Ø 0.225 X 100" FROM THE OUTSIDE OF THE TANK
- 14) INSTALL D4000-1 FITTING WITH FLAT FACING UPWARDS
- 15) BRUSH PROSEAL 890A ON ALL INTERNAL SHEET METAL FOLDS

RELEASE
2015-06-16

APPROVED	DESIGN	ML	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	REV. H
	DRAWN	CC		
	CHECKED	AP	DRAWING NO. D4464	SHEET 4 OF 5
	MFG. APPR.	DD	TITLE	SCALE
	APPROVED	HS	TANK ASSEMBLY	NTS
	DE APPR.	DS		
DATE	15.02.06		COPYRIGHT © 2011 BY DART AEROSPACE LTD THIS DOCUMENT IS UNCLASSIFIED AND IS AVAILABLE ON THE INTERNET. COMMENTS THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR TRANSMITTED TO ANY OTHER PERSON WITHOUT THE WRITTEN PERMISSION OF DART AEROSPACE LTD.	



D4464-041 FUEL TANK ASSEMBLY
WELDING AND RIVETING DETAIL



DETAIL B
ROTATED FOR CLARITY
SCALE 2X

RELEASED
2015-06-16

- NOTES:**
- 1) MATERIAL: N/A
 - 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: N/A
 - 6) IDENTIFICATION: N/A
 - 7) WEIGHT: N/A
 - 8) TRIM FLANGES AS REQUIRED TO FIT ASSEMBLY
 - 9) CENTER HINGE BELOW FUEL CAP FLANGE
 - 10) POSITION FUEL CAP FLANGE AS SHOWN, ELONGATED HOLE APPROXIMATELY HORIZONTAL
 - 11) POSITION FUEL CAP FLANGE SO THAT INNER FACE IS FLUSH WITH INSIDE OF TANK
 - 12) WELD PER DART QSI 004
 - 13) COAT FAYING SURFACES OF D4008-11 TANK HINGE HALF AND D4463-11 TANK FRONT WITH PROSEAL P/S 890B AND WET INSTALL MS20470AD4-4 RIVETS
 - 14) DOME SEAL ALL BUCKED ENDS OF RIVETS WITH PROSEAL P/S 890B

APPROVED	DESIGN	ML	DART AEROSPACE LTD	
	DRAWN	CC	HAWKESBURY, ONTARIO, CANADA	
	CHECKED	AP	DRAWING NO.	REV. H
	MFG. APPR.	DD	D4464	SHEET 5 OF 5
	APPROVED	HS	TITLE	SCALE
	DE APPR.	DS	TANK ASSEMBLY	NTS
DATE		15.02.06	COPYRIGHT © 2011 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR REPRODUCED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO37279

Purchase Order Date 8/1/2017
PO Print Date 8/1/2017

Page Number 1 of 2

Order From :
SKYSERVICE
6120 MIDFIELD ROAD
MISSISSAUGA, ONTARIO L5P 1B1
CANADA

VC-SKY001

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name
Vendor Phone 905-678-5636

Ship To Contact
Ship To Phone
Ship Via: Delivered
Ship Acct:

Buyer
Customer POID
Customer Tax # 10127-2607
Terms Net 30
Currency CAD
FOB FCA - (Free Carrier)

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
----------	--	------------------------	--------------------------------------	----	--------------------------------	---------------	----------------

1	156074	D135-1027-153 Crosstube	8/1/2017 Yes 8/1/2017		1.00	\$400.00	\$400.00
---	--------	-------------------------	-----------------------------	--	------	----------	----------

As per dwg D135-1027-153
Rev.A-PREMLIM

Line Total: \$400.00

2	163145	D4464-041 Fuel Tank	8/1/2017 Yes 8/1/2017		1.00	\$500.00	\$500.00
---	--------	---------------------	-----------------------------	--	------	----------	----------

As per dwg D4464-041

Line Total: \$500.00

Note:

8/1/2017

**skyservice****Work Order Traveler**
Sky Service F.B.O. Inc.

10105 Ryan Avenue, Dorval, Quebec, H9P 1A2

TCCA AMO 53-89 / EASA 145.7142 / BDA AMO 385

WO #: MWO32827	Customer: Dart Aerospace Ltd.	Dept: NDT YUL	Reference:
Descr:	PN:	S/N:	Qty: 1
Make:	Model:	Reg:	A/C S/N:
TSN:	CSN:	TSO:	
Task: UNSCHEDULED			Sequence: 1

Work Required:

CARRY OUT NDT INSPECTION (LIQUID PENETRANT) ON 1 CROSSTUBE + 1 FUEL TANK ASSY

ITEM ID: D135-1027-153 MID HIEGHT FWD CROSSTUBE (QTY)
1 - WORK ORDER ID#: 156074ITEM ID: D4464-041 FUEL TANK ASSY (QTY1) 35797
2 - WORK ORDER ID#: 163145 300
SPN-8-1

Action Taken:						Date:	Initial/Stamp:
LIQUID PENETRANT INSPECTION CARRIED OUT ON ITEMS LISTED ABOVE (ITEMS 1-2) AS PER ASTM1417M-13						AUG 01 2017	DOT-APP 61 53-89
NO CRACK FOUND							
Pen: ZL-27A MWO5678 DEV: SKD-S2 MPO11715 CLEANER: SKC-S MPO13923							
Description	Location	P/N	Qty	Batch	S/N Off	S/N On	

I certified that the maintenance described above has been performed in accordance with the applicable standard of airworthiness.

Signature:	ACA/SCA Stamp	Date: AUG 01 2017
Name: ANTONINO MARCHETTA	DOT-APP 61 53-89	